

Work Order ID 111674

December 01-14 10:08:09 AM

Report
111674 *LH*

Page 1

Item ID: D119-646-143

Accept

N9000040100

Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
Compatible, Fits LH & R

Stop ***NS2***

Start Date: 1/17/14 Start Qty: 1.00

1

Cust Item ID:

Required Date: 1/24/14 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: *V*

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Time	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3905-043	D								
IIN-D119-646	C								

100

0.00

100

DC

0.00

Doc.Control -USB or Paperwork

Memo

Photocopy bluefile & type labels per PPP D119-646-143

CHG 003

004 per ECN 14-628

110

0.00

110

Skidtubes

0.00

Skidtubes

Memo

1- Inspect Mat'l D2500-1-190 for damage

2- Ensure squareness of ends

① Ø 14-12-31

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Item ID: D119-646-143**Accept*****N900040100*****Setup Start *NS1*****Revision ID:****Item Name:** Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
Compatible, Fits LH & R**Stop *NS2*****Start Date:** 1/17/14 **Start Qty:** 1.00 ***1*****Cust Item ID:****Required Date:** 1/24/14 **Req'd Qty:** 1.00 ***1*****Customer:****Reference:****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start *NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop *NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	Chemical Conversion Coat per QSI005 4.1	0.00				1	0	14-12-3	
120 HandFinish Hand Finishing	Memo	0.00							
130	QC7-Inspect Chemical Conversion Coat	0.00							
130 QC Quality Control	Memo	0.00							

DAS
03
3-20

14-12-3

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111674

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Item ID: D119-646-143

Accept

N9000040100

Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
Compatible, Fits LH & R

Stop ***NS2***

Start Date: 1/17/14 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 1/24/14 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150

Skidtubes

Skidtubes

Memo

0.00

1- Install drill jig DT9480 drill all x-bolt spacer holes using 3/16 drill first side only.

2- 2nd side, locating from first saddle holes use DT9861 A/B to drill 2nd side fwd saddle holes.

3- 2nd side locating from fwd saddle drill remaining crossbolt spacer holes using DT9477 9480

4- Scribe batch # inside aft end of tube

14.12.02

14-12-4

155

0.00

155

CNC Bend 1

CNC Delta 100 Bender

Memo

0.00

1- Bend AFT end of tube using CNC Bender 1 and bend prog. D3905 AFT as per dwg D3905. Must use bending Aid DT9538, located 23.25" from Aft end.

2- Ensure bending Aid DT9538 is positioned correctly, that the bender set up in on full wide and that the indexing ridge is covered with graphite grease.

14-12-15

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Item ID: D119-646-143**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
Compatible, Fits LH & R**Start Date:** 1/17/14 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 1/24/14 **Req'd Qty:** 1.00***1*****Customer:****Reference:****Run Start*****NR1*****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Stop*****NR2*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Sequence ID/**
Work Center ID
165**Operation**
Description
QCS- Inspect part completeness to step on W/O**Set Up/**
Down Hours
0.00**Tool ID** **Tool #** **Plan** **Accept** **Reject** **Reject** **Insp.**
Code **Qty** **Qty** **Number** **Stamp*****165***
QC**Memo**

0.00

Quality Control

DAS
03
9-89

14-12-15

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111674

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item ID: D119-646-143

Revision ID:

Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
Compatible, Fits LH & R

Start Date: 1/17/14 Start Qty: 1.00

Required Date: 1/24/14 Req'd Qty: 1.00

1

1

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Date:

SPC (Y/N):

Date:

QC:

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
StampSequence ID/
Work Center ID
180Operation
DescriptionSet Up/
Down Time
0.00

0.00

180

Skidtubes

Skidtubes

Memo

1- Verify dimension of bend as per dwg D3905

2- Buff out marks left from bending.

3- Drill Aft Float bag holes using DT9493 as per dwg D3905 detail G and section F-F, spot face most fwd, top facing wearplate holes to 0.5626" to accommodate insert (1 per side) open to finished size

4- Drill Aft wearplate and wearpad holes using DT9545 as per dwg D3905 detail H open to finished size

5- Open x-bolt spacer holes to finished size as per dwg (sections D-D and E-E)
DO NOT OPEN FWD SADDLE HOLES

6- Deburr, blow out chips from inside of tube

7- Bond web in place as per Dwg D3905 & QSI 015.

A/R Sikaflex-291 128979
Sikaflex expire date: 16-01-01

Start: 1-15pm

Time: _____

Finish: _____

Time: _____

***** (Adhere for 12 hours) *****

Dec 14-12-15

Dec 14-12-15

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Item ID: D119-646-143 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
 Start Date: 1/17/14 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 1/24/14 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00						14-12-16	
200 *200* CNC Bend 1 CNC Delta 100 Bender	Memo 1- Bend Fwd end of tube using bender 1 and bend prog. D3905 Fwd.Use bending aid DT9544 ensure proper positioning 2- Cut Fwd end of tube as per dwg. ***VERIFY MEASUREMENT BEFORE CUTTING***	0.00 0.00						14-12-16	

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Item ID: D119-646-143

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
Compatible, Fits LH & R

Start Date: 1/17/14 Start Qty: 1.00

1

Cust Item ID:

Required Date: 1/24/14 Req'd Qty: 1.00

1

Customer:

Reference:

Run Start

NR1

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop

NR2

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID
210Operation
DescriptionSet Up/
Down Hours
0.00

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

210

Skidtubes

Skidtubes

Memo

0.00

1- Buff out marks left from bending

BE 14-12-16

2- Drill Fwd cap holes using DT8215.

BE 14-12-16

3- Open Fwd saddle holes to finished size as per dwg

DGL 14-12-16.

4- Drill Fwd x-bolt hole using DT9816 and open to finished size as per dwg.

5- Drill 1.87" and 3.74 holes using DT9494 locate from FWD cap hole. (verify measurement) as per dwg DEO D3905-B-1.

6- Drill towing hole and open to finished size using DT9494

7- Drill wearplate holes using DT9613, open to finished size as per dwg D3905-043

8- Open FWD & AFT cap holes as dwg.

9- Deburr, blow out chips from inside of tube.

★
SEE
Attached

15-1-26

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Item ID: D119-646-143

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
Compatible, Fits LH & R

Start Date: 1/17/14

Start Qty: 1.00

1

Cust Item ID:

Required Date: 1/24/14

Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Time	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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220

QCS- Inspect part completeness to step on W/O

0.00

220

QC

Memo

0.00

Quality Control

15-01-29

DAS
9
9-89

224

0.00

224

Skid tubes

Memo

0.00

Skid tubes

1- Countersink x-bolt holes as per dwg

2- Remove alodine prepare for welding

3- Insert x-bolt spacers

4- Weld x-bolt spacer as per dwg
A/R Alum rod Batch: m1308/2

5- Grind welds flush as per dwg

6- Counter bore x-bolt holes as per dwg

7- Deburr

8E15-02-02

15-2-3

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Item ID: D119-646-143

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
Compatible, Fits LH & RStart Date: 1/17/14 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 1/24/14 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Station
225 *225* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				1			38 9-69 15-02-10
226 *226* QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00				1			38 9-69 15-02-10
227 *227* HandFinish Hand Finishing	Pressure Wash per QSI005 4.3 Memo AND REALODINE AS PER PAR09-043	0.00 0.00				1			15-2-20 J/Dec

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Item ID: D119-646-143 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
 Start Date: 1/17/14 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 1/24/14 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Times	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 *240* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>M 131545.</i> Memo <i>APPLY PRIMER/PAINT PER D3905 Rev. D A.P. 15.09.25</i>	0.00 <i>START: 3:35</i> 0.00 <i>OPEN. T: 3:20</i> <i>FINISH 14:05</i>				<i>1</i>	<i>0</i>	<i>15.4.20.</i>	<i>88-8 15 SAS</i>
245 *245* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				<i>1 x d</i>	<i>all</i>	<i>10/10/13</i>	P.T.O. <i>last page.</i>
250 *250* HandFinish Hand Finishing	1-Install inserts as per Dwg D3905. Memo	0.00 0.00				<i>1 x d</i>	<i>all</i>	<i>16/01/20</i>	

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Item ID: D119-646-143 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
 Start Date: 1/17/14 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 1/24/14 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	QC5- Inspect part completeness to step on W/O	0.00							
260									
QC	Memo	0.00							
Quality Control									
270		0.00							
270									
HandFinish	Memo	0.00							
Hand Finishing	1-Install wearpads, gaskets and wearplates as per Dwg D3905. Put sikaflex in insert before installing bolts and washers A/RSikaflex-240/-291 M135772 Sikaflex expire date: 12102								
	2- install plugs assembly with o-ring lube as per dwg. A/R o-ring lube 55 Batch: M135473 RTU 590 M135479 1864								
	3 -Inspect for foreign objects as per QSI 024								
	4 -Install Aft Cap and seal with Sikaflex. Clean excess adhesive. A/RSikaflex-240/-291 M135772 Sikaflex expire date: 12104								
	5- Wing Walk as per dwg QSI005 4.4 Batch: M135819								

1 0 16-0-20. 33 3-09

1 1/2 0 11/1/14

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Setup Start *NS1*

Stop *NS2*

Customer:

Run Start *NR1*

Stop ***NR2***

[illegible]

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Item ID: D119-646-143

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag Float
Compatible, Fits LH & RStop ***NS2***Start Date: 1/17/14 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 1/24/14 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Down Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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300

QC21- Final Inspection - Work Order Release

0.00

300

QC

Memo

0.00

Quality Control

DAS
21
9-89

NOV 08 2016

H16-11-08

Picklist Print

December-01-14 10:08:06 AM

Page 1

Work Order ID: 111674

111674

Parent Item: D119-646-143

D119-646-143

Parent Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag
Float Compatible, Fits LH & R

Start Date: 1/17/14

Required Date: 1/24/14

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: New issue DD verified by:EC
12.11.05 (DEOD3905-B-1)(ecn 12-675) DD verf:JLM IPP REV:C 13.03.20
per chg003 ECN13-534 DD verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D2500-1-190

Manufactured No

110

Each

114.0000

1

1

D2500-1-190

Ext'n -I Beam Tube 4"

**

14-12-3

Location

Loc Qty

Loc Code

LG002

114

105279

2

117806

20

120085

92

D2579

Manufactured No

Each

218.0000

2

D2579

Crossbolt Spacer

**

BE 15-29

Location

Loc Qty

Loc Code

LG001

218

113785

24

123997

194

D2855-3

Manufactured No

270

Each

26.0000

2

2

D2855-3

Cap

**

11 1610120

Location

Loc Qty

Loc Code

FP001

26

111898

22

117601

4

B135830
B142564

12

Picklist Print

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Work Order ID: 111674

111674

Parent Item: D119-646-143

D119-646-143

Parent Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag
Float Compatible, Fits LH & R

Start Date: 1/17/14

Required Date: 1/24/14

D3492-5

Manufactured No

270 Each

114.0000 16 16

Required Qty: 1.00

D3492-5

Plug

**

B156918 (x16) all 16/16/16

Location

Loc Qty

Loc Code

FP001

114

104854

3

105612

4

112740

65

120153

42

B138148
B138880

X7
X14

NAS1611-005

Purchased No

270 Each

366.0000 16 16

NAS1611-005

O-RING

**

all 16/16/16

Location

Loc Qty

Loc Code

FP001

366

m126974

15

m129198

75

m129384

276

M135706

X6

D3672-1

Manufactured No

270 Each

653.0000 2 2

D3672-1

Washer, Phenolic

**

all 16/16/20

Location

Loc Qty

Loc Code

FG

10

85222

10

ST055

643

113581

414

120116

187

80369

34

99099

8

X2

Picklist Print

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Work Order ID: 111674

111674

Parent Item: D119-646-143

D119-646-143

Parent Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag
Float Compatible, Fits LH & R

Start Date: 1/17/14

Required Date: 1/24/14

D3681-1 Manufactured No

190 Each

Start Qty: 1.00
8 8

Required Qty: 1.00

D3681-1

Spacer

**

OK 15-01-29

Location

Loc Qty

Loc Code

LG001

70

114884

2

123088

36

124420

32

D3846-1 Manufactured No

270 Each

16.0000 1 1

D3846-1

Gasket

**

01/17

Location

Loc Qty

Loc Code

FP001

16

51827

4

53735

12

D3846-11 Manufactured No

270 Each

44.0000 1 1

D3846-11

Gasket

**

01/17

Location

Loc Qty

Loc Code

FP001

44

93954

44

D3847-1 Manufactured No

270 Each

33.0000 8 8

D3847-1

Wearpad

**

del 12/16/13

Location

Loc Qty

Loc Code

FP001

33

112444

11

113736

11

88420

11

B138358 x6
B150954 x3
B151947 x3

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Shop Packet Print

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Picklist Print

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Work Order ID: 111674

111674

Parent Item: D119-646-143

D119-646-143Parent Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag
Float Compatible, Fits LH & R

Start Date: 1/17/14

Required Date: 1/24/14

D3847-11

Manufactured No

270

Each

18.0000

1 1

Start Qty: 1.00

Required Qty: 1.00

D3847-11

Wearpad

**

all 16/11/03

LocationLoc QtyLoc Code

FP001

18

B142783

x1

112558

8

113833

10

D3847-043

Manufactured No

270

Each

3.0000

1 1

D3847-043

Fwd Wearplate Assy, Std/ Float Gear

**

all 16/11/03

LocationLoc QtyLoc Code

FP002

3

B139751

x1

51820

1

52533

2

D3847-045

Manufactured No

270

Each

6.0000

1 1

D3847-045

Center Wearplate Assy, Std/Float

**

all 16/11/03

LocationLoc QtyLoc Code

FP002

6

B139752

x1

87210

4

88242

2

D3847-049

Manufactured No

270

Each

6.0000

1 1

D3847-049

Aft Wearplate Assembly, Float Gear

**

all 16/11/03

LocationLoc QtyLoc Code

ST606

6

B36773

x1

88267

2

93904

4

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Shop Packet Print

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Picklist Print

December-01-14 10:08:08 AM

Work Order ID: 111674

111674

Parent Item: D119-646-143

D119-646-143

Parent Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag
Float Compatible, Fits LH & R

Start Date: 1/17/14

Required Date: 1/24/14

D3885-3 Manufactured No

170 Each

Start Qty: 1.00
6.0000 1 1

Required Qty: 1.00

D3885-3

Standard Web

**

14-12-10 JH

Location

Loc Qty

Loc Code

LG002

6

99134

6

D3903-1 Manufactured No

190 Each

88.0000 12 12

**

01-15-29

D3903-1

Spacer

Location

Loc Qty

Loc Code

LG001

88

112408

2

117619

46

124312

40

D3672-3 Manufactured No

270 Each

821.0000 12 12

**

plus

D3672-3

Washer, Phenolic

Location

Loc Qty

Loc Code

FG

111

84432

11

89273

100

ST055

263

107316

11

110251

8

112455

9

113746

188

124349

39

89273

7

93925

1

ST064A

447

121577

447

Picklist Print

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Work Order ID: 111674

111674

Parent Item: D119-646-143

D119-646-143

Parent Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag
Float Compatible, Fits LH & R

Start Date: 1/17/14

Required Date: 1/24/14

D3683-3 Purchased No 250 Each 235.0000 12 12 Start Qty: 1.00 Required Qty: 1.00

D3683-3

Insert

Location Loc Qty Loc Code

ST057 235
47805 235

ALS4-1032-130 AELS4-1032-130 Purchased No 250 Each 2,627.000 42 42

ALS4-1032-130

Rivnut

Location Loc Qty Loc Code

st549 2627
M126109 57
M128211 48
M128649 2522

AN3C5A Purchased No 270 Each 2,020.000 44 44

AN3C5A

Bolt

Location Loc Qty Loc Code

FG 5
122800 5
ST338a 1932
M130770 1000
M130851 932
ST350 83
M128911 25
M128973 10
M129913 4
M130358 44

December-01-14 10:08:08 AM

Shop Packet Print

Page 6

Picklist Print

December-01-14 10:08:08 AM

Page 7

Work Order ID: 111674

111674

Parent Item: D119-646-143

D119-646-143

Parent Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag
Float Compatible, Fits LH & R

Start Date: 1/17/14

Required Date: 1/24/14

NAS1149C0332R

Purchased

No

Each

Start Qty: 1.00
6,027.000

44

Required Qty: 1.00

NAS1149C0332R

WASHER

**

see 1411103

Location

Loc Qty

Loc Code

CA

83

m129682

83

ST271

5944

122063

41

125654

237

m126319

51

m127306

1425

m127831

26

m128591

75

m129499

191

m130325

2898

m130466

1000

Each

500.0000

12

**

N/A

NAS1149C0463R

Purchased

No

NAS1149C0463R

Washer

Location

Loc Qty

Loc Code

ST271

500

119097

1

123248

2

123355

55

m127306

114

m128401

328

270

Each

188.0000

12

12

**

N/A

MS27039C4-08

Purchased

No

MS27039C4-08

SCREW

Location

Loc Qty

Loc Code

ST282

188

m126319

88

m128429

100

December-01-14 10:08:09 AM

Shop Packet Print

Page 7

Picklist Print

December-01-14 10:08:09 AM

Page 8

Work Order ID: 111674

111674

Parent Item: D119-646-143

D119-646-143

Parent Item Name: Replacement Skidtube with Wearplates & Wearpads, DART (Apical) Tri-Bag
Float Compatible, Fits LH & R

Start Date: 1/17/14

Required Date: 1/24/14

MS24694-CS2

Purchased

No

Each

Start Qty: 1.00
132.0000

2

Required Qty: 1.00

MS24694-C52

SCREW

all 161102

Location

Loc Qty

Loc Code

ST287

132

124308

50

m127059

82

M135466

v2

*Add 1x DSI 9685-011 if NOT
going into kit N/A 12-11-02*

ADD:

AN4C46A X3:

B: M135311

D5101-041 X2:

B: B137417

D5101-047 X1:*

B: B144975

D5101-3 X6:

B: B127964

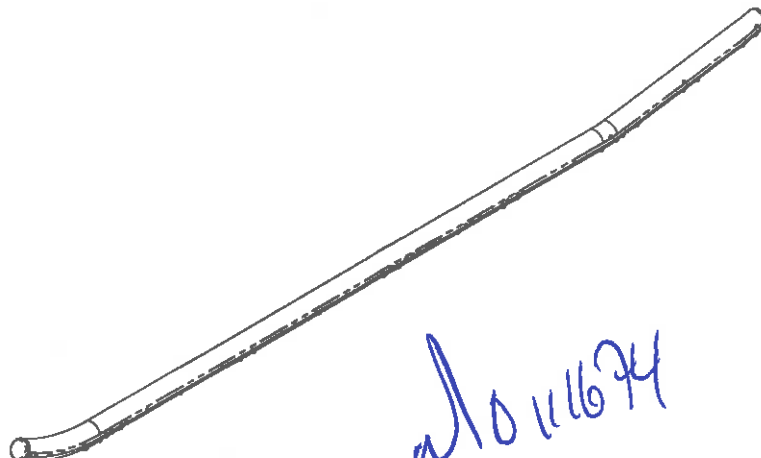
D5101-5 X6

B: B135948

M\$21043-4 X3

B: B135600

} all 161102



D3905-041 FLOAT SKIDTUBE ASSY WITH WEARPAD (SHOWN)
D3905-043 FLOAT SKIDTUBE ASSY WITH WEARPLATE (SIMILAR)
D3905-045 FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE (SIMILAR)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3885-3 FLOAT WEB PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2 BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3905-041 = 35.4 lbs
D3905-043 = 42.8 lbs
D3905-045 = 48.0 lbs
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 8.5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) INSERT D3885-3 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP
- 11) INSERT D3492-045 PLUG ASSY INTO Ø0.197 HOLES (BOTH SIDES OF TUBE)
- 12) USE DART DRILL TEMPLATE DT8932 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARPLATE INSERTS. INSTALL AELS-1032-130 INTO D3905-11 ONLY. INSTALL AN3C5A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241/-291.

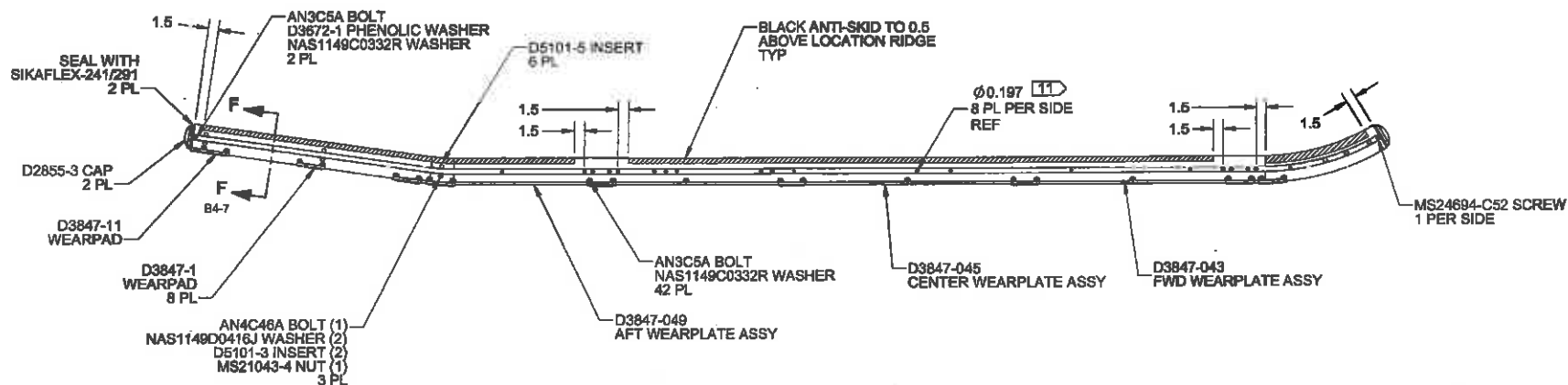
ITEM	QTY -041	QTY -043	QTY -045	P/N	DESCRIPTION
1	X			D3905-041	FLOAT SKIDTUBE ASSY WITH WEARPAD
2		X		D3905-043	FLOAT SKIDTUBE ASSY WITH WEARPLATE
3			X	D3905-045	FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE
10	2	2	2	D2679	CROSS BOLT SPACER
11	2	2	2	D2855-3	CAP
12			16	D3411-3	WASHER
13	16	16		D3492-045	PLUG ASSY
14	2	2	2	D3672-1	PHENOLIC WASHER
15	8	8	8	D3681-1	SPACER
16	8	8	1	D3847-1	WEARPAD
17	1	1	1	D3847-11	WEARPAD
18		1		D3847-043	FWD WEARPLATE ASSY
19		1		D3847-045	CENTER WEARPLATE ASSY
20		1		D3847-049	AFT WEARPLATE ASSY
21			1	D3849-045	AFT WEARPLATE ASSY
22			1	D3849-047	FWD WEARPLATE ASSY
23	1	1	1	D3885-3	FLOAT WEB
24	12	12	12	D3903-1	SPACER
25			16	D3904-1	WASHER
26	1	1		D3905-11	FLOAT SKIDTUBE
27			1	D3905-13	FLOAT SKIDTUBE
28	6	6	6	D5101-3	INSERT
29	6	6	6	D5101-5	INSERT
30	3	3	3	D5101-041	CROSSBOLT SPACER ASSY
41	42	42	10	ALS4-1032-130	INSERT
42	44	44	12	AN3C5A	BOLT
43			4	AN3C46A	BOLT
44			4	AN3C50A	BOLT
45	3	3	3	AN4C46A	BOLT
46	44	44	8	NAS1149C0332R	WASHER (OR AN980C10L)
47	12	12	12	NAS1149C0463R	WASHER (OR AN960C416)
48	6	6	6	NAS1149D0416J	WASHER
49			8	MS21043-3	NUT
50	3	3	3	MS21043-4	NUT
51	2	2	2	MS24694-C52	SCREW

RELEASED

2014 NOV 24
EON 14-028

D	REVISED DIMENSIONS AND PROVIDED TOLERANCE TO SKIDTUBE OVERALL LENGTH PAGE 5-1 REVISED NOTE 2 AND NOTE 7 PAGE 1 (ZN B8, ZN A8-1) REVISED -041/-043/-045 DRAWING VIEWS. REVISED SECTION VIEW F-F (ZN B4-7). REVISED BOM REF. PARTS 288 AND PARTS 272	AK	14.08.08
C	(BHT 1 PL. ZN C3-2, C3-3, C3-4) ITEM 13, QTY 2 WAS 4. ITEM 42 AND 43, QTY 44 WAS 46. ADD ITEM 49, MS24694-C52 WAS AN3C5A, D3672-1 AND NAS1149C0332R, (ZN C7-7) Ø0.201 CSK Ø0.385 X 100" WAS Ø0.204 THRU, (ZN A4-5, A4-6) ADD RELIEF INSTRUCTION, ADD ITEM 10, CROSS BOLT SPACER (ZN D4-1, C8-7, D8-7)	DB	13.02.21
B	REVISED PART LIST, ALS4-1032-130 WAS AELS-1032-130 (ZN A8-5, A8-6, C8-7, C8-7, A8-7); ADD DT8832 (ZN A8-1); D2855-3 WAS D2679 (ZN C8-2, C1-2, C8-3, C1-3, C8-4, C1-4); AN3C5A WAS AN3C4A (ZN C7-2, C1-2, C7-3, C1-3, C7-4, C1-4); D3849-047 WAS D3849-041 (ZN B3-4); ADD D3411-3 (ZN B3-4); ADD AN3C50A (ZN B3-4); Ø0.313 WAS Ø0.328 (B2-5, B2-6, C2-7, A8-7 & D7-5). REVISED NOTE IV (ZN A8-7)	RF	09.06.30
D	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	ML	DART AEROSPACE USA, INC.	
DRAWN	RF	KENT, WA	
CHECKED	VS	DRAWING NO.	REV. D
MFG. APPR.	DD	D3905	SHEET 1 OF 8
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	A119 FLOAT SKIDTUBE ASSY	
DATE	14.08.08	NTS	

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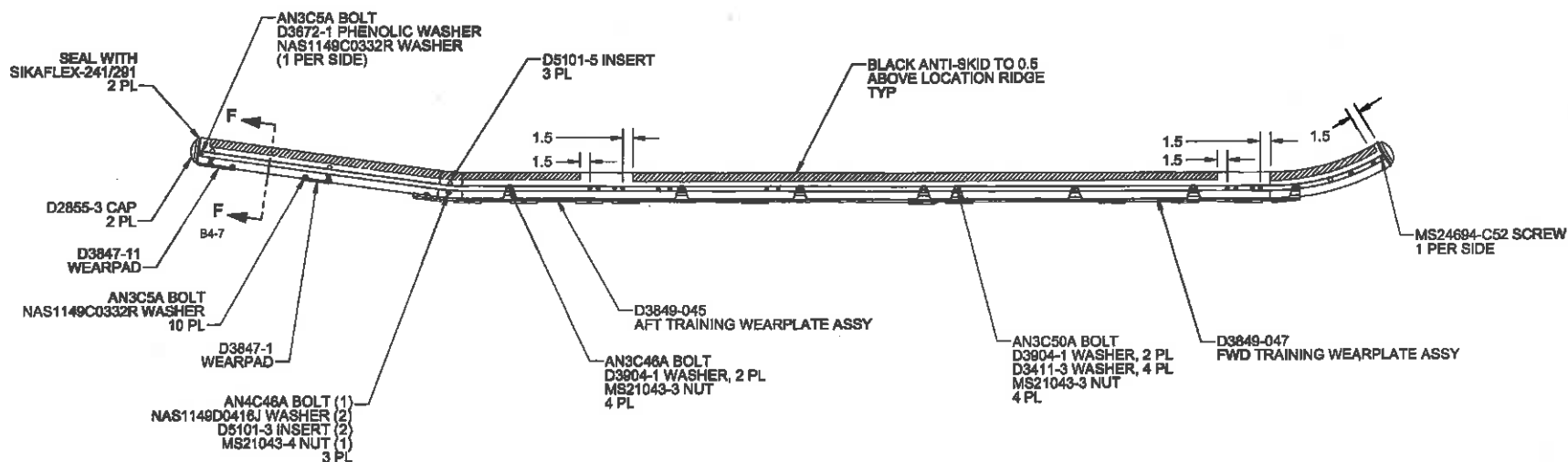
D3905-043 FLOAT SKIDTUBE ASSY WITH WEARPLATE
(MAKE FROM D3905-11 SKIDTUBE)

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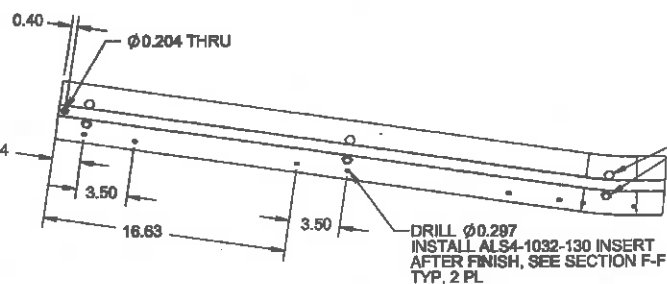
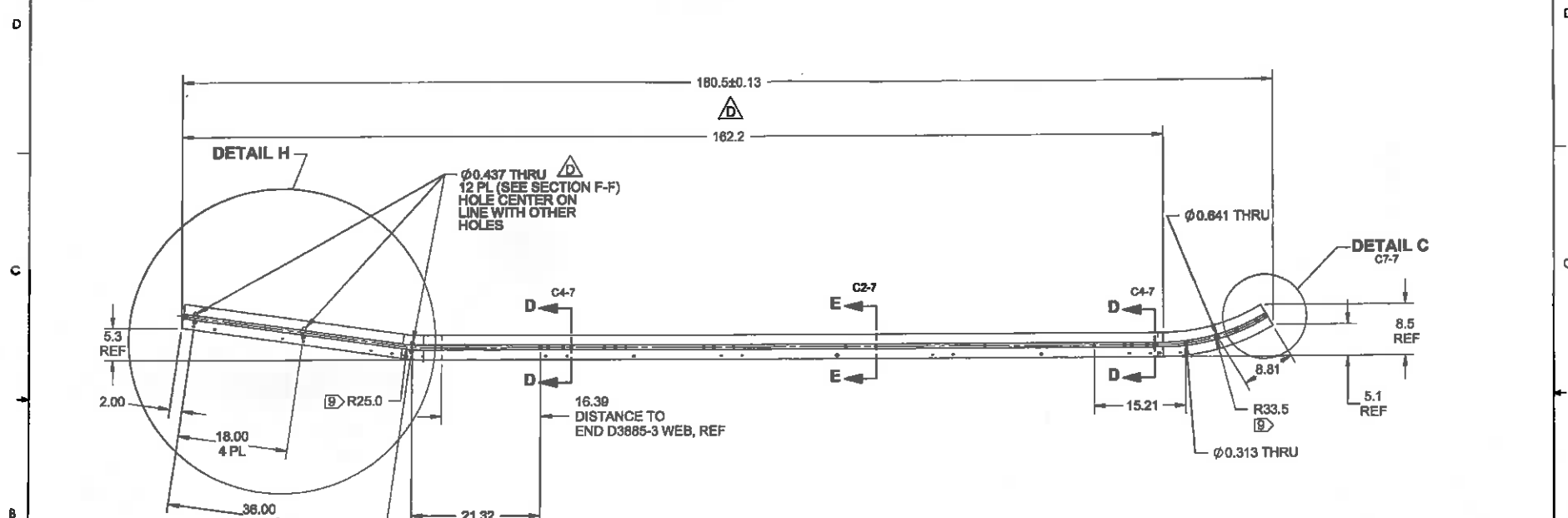
D3905-045 FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE
(MAKE FROM D3905-13 SKIDTUBE)

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8 7 6 5 4 3 2 1



DETAIL H
SCALE 2X

D3905-11 FLOAT SKIDTUBE
(MAKE FROM D3885-1 TUBE)

RELIEVE RIDGE FLUSH WITH SKIDTUBE
FOR INSERT CLEARANCE
MAX 0.060 INTO THE RIDGE

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2014 NOV 26

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8 7 6 5 4 3 2 1

DETAIL G

5.3
REF

2.00

18.00

4 PL

R25.0

21.32

16.39

DISTANCE TO

END D3885-3 WEB, REF

180.5±0.13

162.2

Ø0.437 THRU

12 PL (SEE SECTION F-F)

HOLE CENTER ON

LINE WITH OTHER

HOLES

Ø0.641 THRU

Ø0.313 THRU

R33.5

8.81

8.4

REF

5.1

REF

15.21

Ø0.204 THRU

Ø0.297

INSTALL ALS4-1032-130 INSERT

AFTER FINISH, SEE SECTION F-F

TYP, 2 PL

RELIEVE RIDGE FLUSH WITH SKIDTUBE

FOR INSERT CLEARANCE

MAX 0.060 INTO THE RIDGE

0.40

1.94

3.50

3.50

16.63

36.00

4 PL

DETAIL G

SCALE 2X

D

C

B

A

8

7

6

5

4

3

2

1

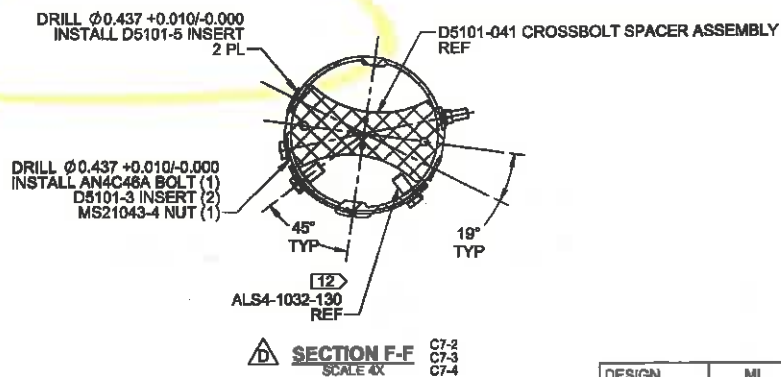
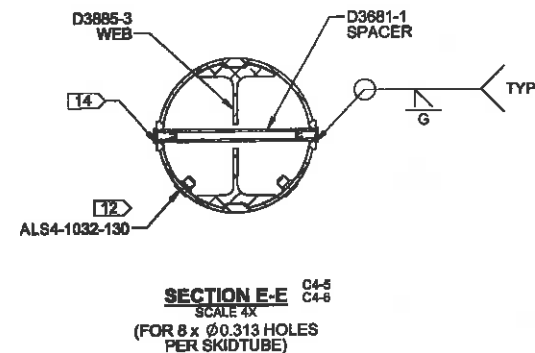
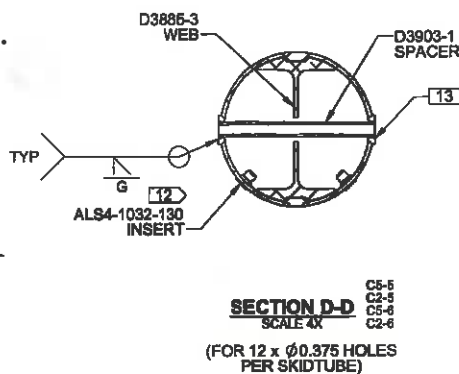
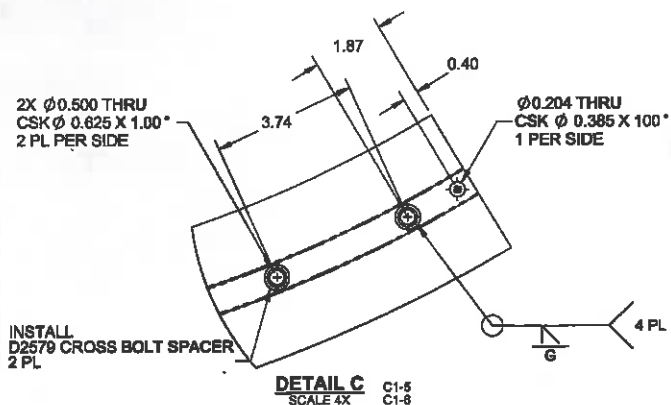
D3905-13 FLOAT SKIDTUBE
(MAKE FROM D3905-1 TUBE)

0.190"
ACCEPTABLE

RELEASED

2014 NOV 24

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NOTES:

- 13) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø 0.375 HOLES ONLY:
- CHAMFER HOLES Ø 0.475 x 45° (BOTH SIDES)
 - INSERT D3903-1 SPACER
 - WELD INTO PLACE AND GRIND FLUSH
 - CBORE TO 0.313 x 0.75 DEEP
 - DEBURR HOLES

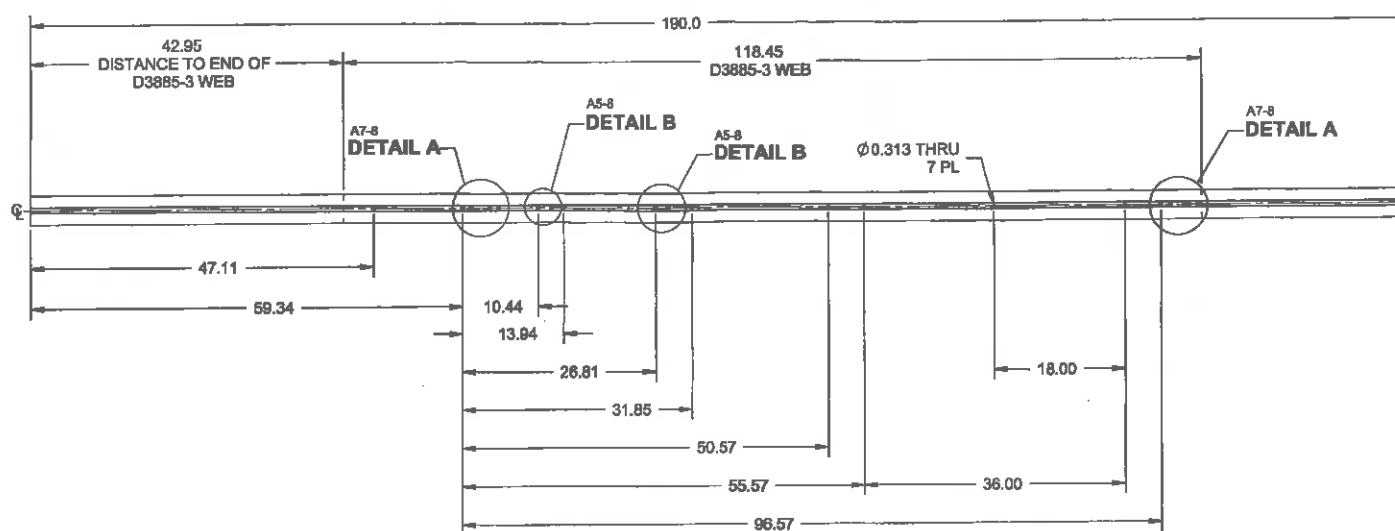
- 14) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø 0.313 HOLES ONLY:
- CHAMFER HOLES Ø 0.354 x 45° OR 0.050 DEEP x 45° (BOTH SIDES)
 - INSERT D3681-1 SPACER
 - WELD INTO PLACE AND GRIND FLUSH
 - DEBURR HOLES

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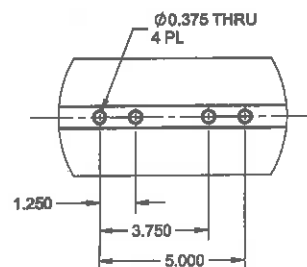
2014 NOV 24

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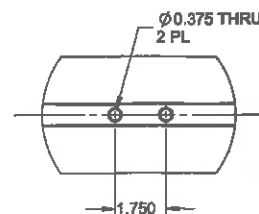
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D3905-1 TUBE
(MAKE FROM D2500-1-190 EXTRUSION)



DETAIL A
SCALE 4X
D6-8
D2-8



DETAIL B
SCALE 4X
D5-8
D4-8

RELEASED
2014 NOV 24

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
--	---	--	---	--	--	--

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	15/1/20	Z10	1	Pilot hole for Ø0.641 TURNING HOLE DRILLED IN WRONG LOCATION: DRILLED 0.6" AP.	DAS 12 8-89 15/1/20	Acceptable to fill with weld per D.S. email A/R M130812	BE 15-01-22		
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
--	--	---	--	--

Chris Provencal

From: David Shepherd
Sent: Tuesday, January 20, 2015 2:27 AM
To: Chris Provencal
Subject: RE: NCR D3905

Hi Chris,

Since the hole is small, on the aft side of the actual tow ring hole, and is on a 119 skidtube (not a 412 skidtube), I think it is acceptable to fill this hole with weld and grind flush.

Regards,
David

From: Chris Provencal
Sent: January-19-15 2:01 PM
To: David Shepherd
Subject: NCR D3905

David,

NCR D3905 Float Skidtube.

When drilling the pilot hole for the 0.641 dia. tow ring hole, an employee misused the tool and drilled the hole 0.6" aft. The tube is fully bent and they are completing the holes in the bent portion. See attached pdf which shows the relative geometry.

Can we fill this pilot hole with weld? In the past you did not want weld near the tow ring hole because the heat affected zone may effect hole elongation. The amount of weld to hide the hole would be minor.

-Chris

14.12.17

B111674

Seq 210

- 1- Buff out marks left from bending
- 2- Drill Fwd cap holes using DT8215.
- 3- Open Fwd saddle holes to finished size as per dwg
- 4- Drill Fwd x-bolt hole using DT9816 and open to finished size as per dwg.
- 5- Drill 1.87" and 3.74 holes using DT10045 A&B locate from FWD saddle hole hole. (verify measurement) as per dwg.
- 6- Drill towing hole and open to finished size using DT10047 locate from fwd saddle hole.
- 7- Drill wearplate holes using DT9613, open to finished size as per dwg D3905-043
- 8- Open FWD & AFT cap holes as dwg.
- 9- C'sink FWD cap hole as per detail "C"
- 10- Deburr, blow out chips from inside of tube.

> BE 14-12-16

> DOC 14-12-16.

15-1-26

Seq 224

NOTE: TACK IN 2 MOST FWD X-BOLT SPACERS AND TEST FIT FWD GROUND HANDLING FIXTURE, IF FIXTURE FITS WELL THEN PROCEED. FIXTURE DT10091.

- 1- Countersink x-bolt holes as per dwg
- 2- Remove alodine prepare for welding
- 3- Insert x-bolt spacers
- 4- Weld x-bolt spacer as per dwg
- A/R Alum rod Batch: M130812
- 5- Grind welds flush as per dwg
- 6- Counter bore x-bolt holes as per dwg
- 7- Deburr

} BE 15-02-02

DQA:

Date:

2017-04-05



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

MAR 09 2017

Work Order update only ☐

Work Order: <u>111674</u>	DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS			
Part No. <u>0119646-143</u>		Skid-tube ☒	Crosstube ☒	Water Jet ☐	Engineering ☒
NCR No. <u>17-6322</u>		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐
		Thermoforming ☐	Finishing ☒	Rec/Store/Packaging ☐	Other ☐
		Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	15.08.13	210	1	INSTALLATION OF NEW 05105-5 INSERTS REQUIRES CLEARANCE OF "0.000" A.P. INSTEAD OF "0.060 MAX" ACCEPTABLE TO OPEN UP THRU HOLES TO Ø2.495	A.P. 15.08.13	ACCEPTABLE, ENGINEERING ERROR • re-work the • re-finish (touch-up locally) • re-use D 3905 drill open PAR.	 15-8-20	 15-8-20	DAS 9 9-89 1503-20
Doc/Data				0.465		PAR 15-447			
Equip/Tooling				A.P.					
Handling/Pre				15.11.04					
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☒ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order NCR

Reviewed
DQA:
Date:

Printed on: Tuesday, August 18, 2015

Details

Raised Date 8/18/2015	Status Open	Owner Forbes, Nigel	Number NCR15-5252
Target Date 9/1/2015	Standard	Severity MAJOR	
Process Work Order NCR		Audit	
Raised By Person Duval, Patrick	Raised Against (Department or Supplier)	Fault Category General\BOM/Route	
Details during re-work as per PAR15-447, it was notice that skidtube D119-646-143 was powdercoat and should have been spray paint			
Keywords		Product D119-646\D119-646-143	
Document		Root Cause Data/Documentation	
Closed By	Closed Date	Resolution	

Verification & Review

Target Date 9/1/2015	Owner Duval, Patrick	Closed Date	Closed By
Details			

Actions

Number	Owner	Target Date	Completed Date
Details		Response	
1	Lavoie, Chantal	9/1/2015	
issue PO to paint strip skidtube P10: 29548		C/L 15/08/21	
3	Duval, David	9/1/2015	
update route as per drawing D3905 Rev D			
2	Sheldon, Andrew	9/1/2015	
prime and paint as per drawing D3905 Rev D primer B 30992/paint B 132896 No paint on saddle Area		DAS 41 9-09 15-10-1	



Manufacturing Inc.

2056 County Rd #4, L'Orignal, Ontario K0b 1K0

Phone 613-675-1208

Fax 613-675-1250

PACKING SLIP

TO : DART AEROSPACE
1270 Aberdeen Street
Hawkesbury ON
K6A 1K7

Date : Aug 27/2015

SALESPERSON:		JOB #	PO NUMBER :	
		15-0354-22		
QTY ORDER	DESCRIPTION		QTY SHIP	LINE TOTAL
1	Decaper tuyaux aliminium		1 15/8/28 SD	

Client: (PRINT NAME) _____ (SIGNATURE) _____

THANK YOU FOR YOUR BUSINESS!

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

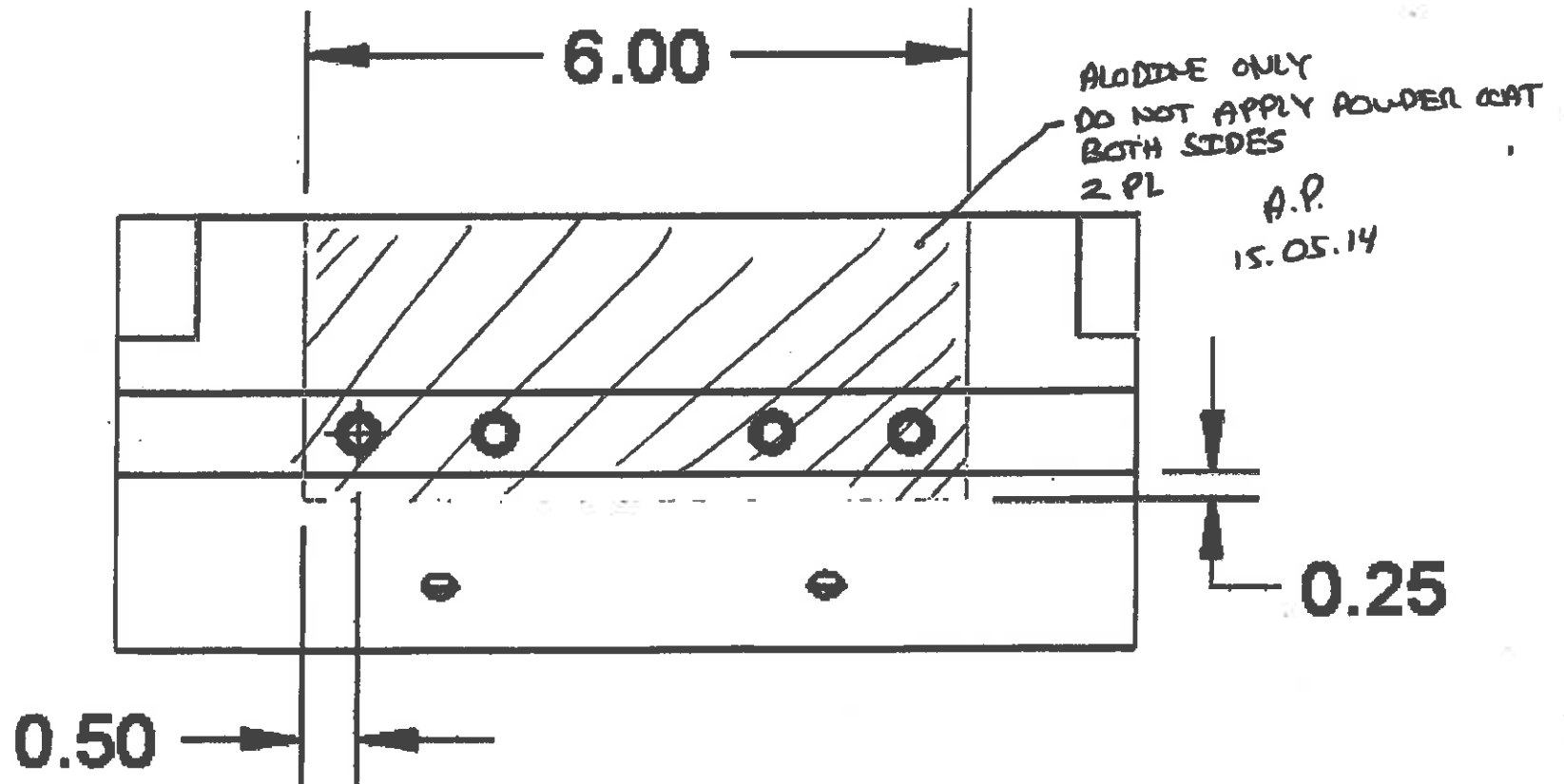
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	15.09.25	1		NO PRIME/PAINT IN SADDLE LOCATIONS APT FLOAT HOLES USE DS101-041 (2x) & DS101-047 (1x)	A.P. 15.09.25	ACCEPTABLE PER ATTACHED	A.P. 15.09.25		
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design		15.11.25		1	WEARPLATES WITH TEXTURED COATING REPLACES, WEARPLATES USING GASKETS.	A.P. 15.11.25	ACCEPTABLE			
Doc/Data										
Equip/Tooling										
Handling/Pre										
Material										
Operator										
Offset/Setup										
Process										
Supplier										
Training										
Transport										
Unapproved										

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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DRAWING NO. D3905	TITLE A119 FLOAT SKIDTUBE ASSY	REV. D	DART AEROSPACE USA, INC. ENGINEERING ORDER		D.E.O. NO. D3905-D-1	SHEET NO. SHEET 1 OF 3	SCALE NTS
DRAWN AJS	CHECKED <i>[Signature]</i>	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>		DE APPR.		
DATE 16.10.31	DATE 16/11/61	DATE 16.11.01	DATE 20/6.11.01		DATE		

SHEET 1 MODIFY PARTS LIST AS SHOWN:

IS:

ITEM	QTY -041	QTY -043	QTY -045	P/N	DESCRIPTION
1	X			D3905-041	FLOAT SKIDTUBE ASSY WITH WEARPAD
2		X		D3905-043	FLOAT SKIDTUBE ASSY WITH WEARPLATE
3			X	D3905-045	FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE

(ADD)	30	2	2	2	D5101-041	CROSSBOLT SPACER ASSY
	31	1	1	1	D5101-047	CROSSBOLT SPACER ASSY

(ADD)	40	6			AN3C4A	BOLT
	42	38	44	12	AN3C5A	BOLT

WAS:

ITEM	QTY -041	QTY -043	QTY -045	P/N	DESCRIPTION
1	X			D3905-041	FLOAT SKIDTUBE ASSY WITH WEARPAD
2		X		D3905-043	FLOAT SKIDTUBE ASSY WITH WEARPLATE
3			X	D3905-045	FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE

30	3	3	3	D5101-041	CROSSBOLT SPACER ASSY
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42	44	44	12	AN3C5A	BOLT
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SHEET 1 ADD NOTE 13 AS SHOWN:

NOTES:

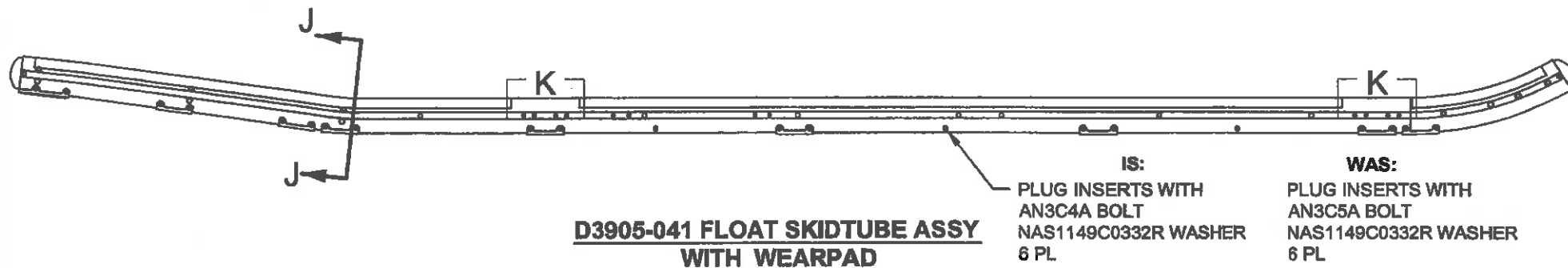
13) MASK THIS AREA. DO NOT APPLY PRIMER OR PAINT

PRELIMINARY ISSUE

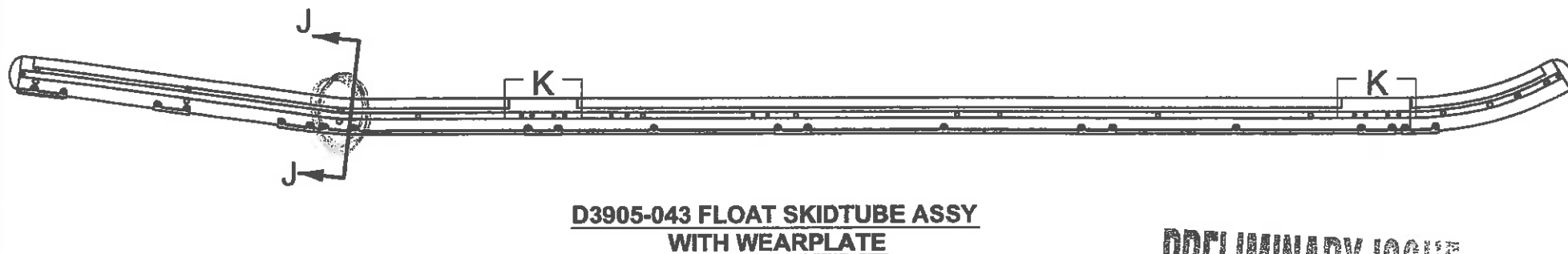
ADD 16.11.01

DRAWING NO. D3905	TITLE A119 FLOAT SKIDTUBE ASSY	REV. D	DART AEROSPACE USA, INC. ENGINEERING ORDER		D.E.O. NO. D3905-D-1	SHEET NO. SHEET 2 OF 3	SCALE NTS
DRAWN AJS	CHECKED g	MFG. APPR. A	APPROVED AM		DE APPR.		
DATE 16.10.31	DATE 16/11/01	DATE 16.11.01	DATE 2016.11.01		DATE		

SHEET 2: (1) AT THE BEND LOCATION ONLY REPLACE D5101-041 WITH D5101-047 AS SHOWN IN SECTION J-J.
 (2) ADD DETAIL K
 (3) UPDATE PLUGGING FASTENERS AS SHOWN:



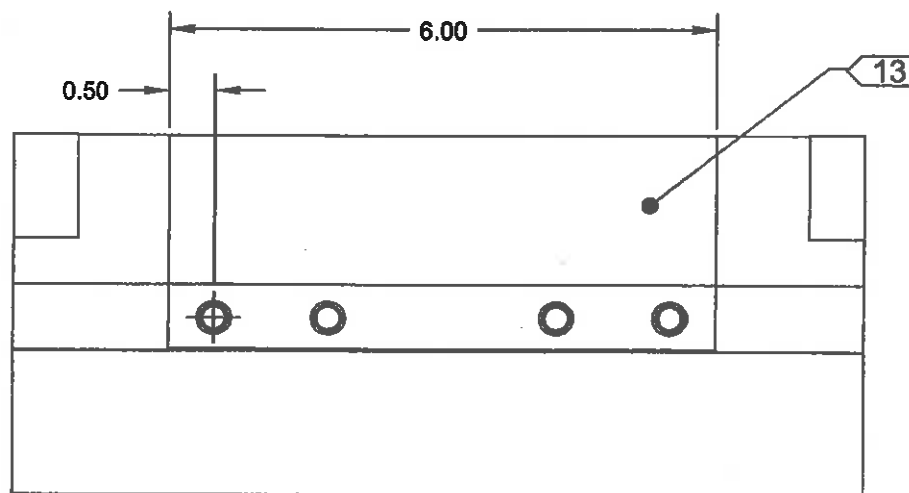
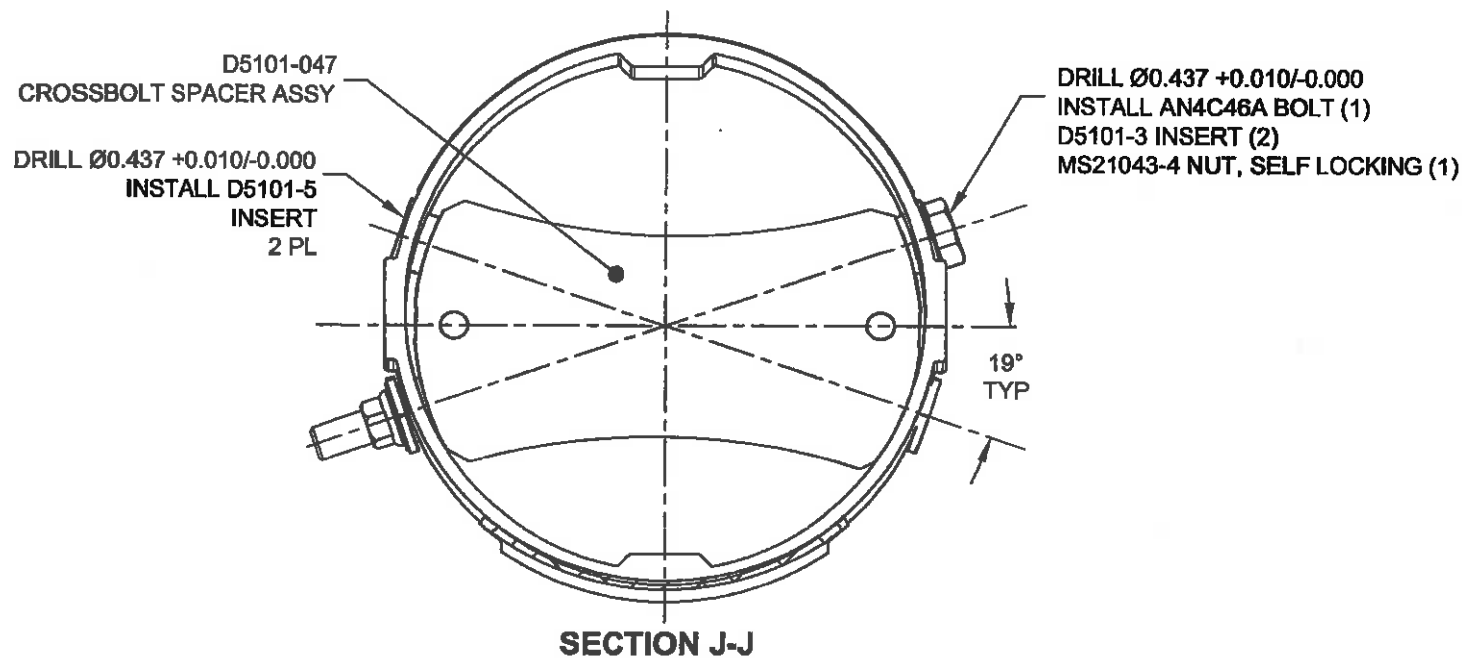
SHEETS 3 AND 4: (1) AT THE BEND LOCATION ONLY REPLACE D5101-041 WITH D5101-047 AS SHOWN IN SECTION J-J.
 (2) ADD DETAIL K



PRELIMINARY ISSUE
 ASS 16.11.01

DRAWING NO. D3905	TITLE A119 FLOAT SKIDTUBE ASSY	REV. A	DART AEROSPACE USA, INC.	D.E.O. NO. D3905-D-1	SHEET NO. SHEET 3 OF 3	SCALE NTS
DRAWN AJS	CHECKED <i>UP</i>	MFG. APPR. <i>AK</i>	APPROVED <i>QU</i>	DE APPR.		
DATE 16.10.31	DATE 16.11.01	DATE 16.11.01	DATE 2016.11.01	DATE		

SHEET 7 ADD SECTION J-J AND DETAIL K TO THE FACE OF DRAWING AS SHOWN:



PRELIMINARY ISSUE
ADD 16.11.01